ABSTRACT OF THE DISCLOSURE

A method of providing cryptographic information and flow control includes first determining a target domain from an IP address. An organization policy is looked up from a credential store, and an algorithm and credentials specified for the target domain are looked up in a domain-credential map. Any further credentials that are provided and that are permitted by the organizational policy are added. A working key is then generated, and information is received in the form of a receive packet. Any packet header is stripped from the receive packet and the remaining data is encrypted. Key splits are retrieved from the credential store, and are combined to form a key-encrypting key. The working key is the encrypted with the key-encrypting key, and a CKM header is encrypted. The encrypted CKM header is concatenated to the beginning of the encrypted data to form transmit data, and the packet header and the transmit data are concatenated to form a transmit packet. The transmit packet is then provided to a network interface card for transmission on a network.